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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/040,242

11/09/2001

Michelle Lu

680.0043USU

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05/01/2006

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EXAMINER

GHALI, ISIS A D

ART UNIT

PAPER NUMBER

1615

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,242	LU ET AL.	
	Examiner	Art Unit	
	Isis Ghali	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/15/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) 11,12 and 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,13-16 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The receipt is acknowledged of applicants' amendment, request for extension of time and request for RCE, all filed 02/15/2006.

Claims 17 and 18 have been canceled.

Claims 11, 12, 19-24 are withdrawn from consideration as being drawn to nonelected invention.

Claims 1-10, 13-16, and 25-29 are included in the prosecution.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/15/2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-10, 13-16, and 25-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Nowhere applicants disclosed that "the broth has a broad range of plant cell constituents of the plant seed cells". Applicants disclosed on page 4, lines 1-4, applicants disclosed that "The total seed cell is broken down through breaking or fracturing of cell walls to deliver the broad range of the plant cell constituents. The plant seed cells are then incorporated into a pharmaceutically or cosmetically acceptable vehicle and/or topical composition". Therefore, the amendment has introduced new matter because the specification as originally filed does not disclosed that the broth has a broad range of plant cell constituents as currently claimed.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-10, 13-16, and 25-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The expression "broad range" does not set out the metes and bounds of the claim. Recourse to the specification does not define the expression "broad range" in term of concentration, percentage or ratio.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 1-10, 13-16, and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0071878 ('878) in view of WO 00/64472 ('472).

US '878 teaches a topical composition comprising homogenized cultured seed cells obtained from cucumber and carrot that used in cosmetic and dermatological compositions (abstract; page 3, 0029-0031, page 4, table 2; page 5, 0038, 0039, 0041; page 10, 0137; page 11, 0143, 0144; page 17, claim 10). The composition is in the form of gel, cream and comprises acceptable vehicle and selected from polyethylene glycol, oils, silicone oil, or fatty acids (page 10-11, 0137). The composition used to treat skin disorders such as hirsutism, reduction of nail growth, hair treatment, inhibition of scar formation (page 18, claim 22).

However, US '878 does not teach the culture media is broth that has broad range of plant cell constituents as claimed in claims 1 and 13, the amount of the plant seed cells in the composition as claimed in claims 2-5, 7, 15 and 16, the specific plants used in the composition as claimed in claims 6, 14, 25-29, and the specific skin conditions treated by the composition.

Applicants do not show superior and unexpected results obtained from using the broth as culture media. US '878 disclosed that any culture media will be suitable, paragraph 0038. The broad range of plant cell constituents is expected to be present in any cultured cell depending on plant species once the cells placed in culture media.

According to the intended use and the site of application, one having ordinary skill in the art would manipulate the amount of the cultured seed cells in the composition in order to achieve a beneficial effect. The claimed amounts do not impart patentability

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to a composition comprising undifferentiated plant seed cells, absent evidence to the contrary. Also selection of specific seeds is within the skill in the art depending on the specific use.

WO '472 teaches a method and composition for treating dermatological conditions using fruit extract, with the extract from pomegranate is preferred (abstract). The composition used to treat age spots, reduced skin moisture, deepening of skin lines, blemished skin and impetigo (page 11, lines 7-10). The amount of the fruit extract in the composition ranges from 0.1 to 20% (page 11 lines 15-16). The extract can be from the seed (page 11, line 24). The composition comprises a vehicle as oils and is in the form of gel or cream (page 12, lines 1-15, page 25, lines 26-30).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the composition comprising cultured plant seed cells in a topical composition to treat skin disorders as disclosed by US '878, and to select the specific plant seeds depending on the condition to be treated as disclosed by WO '472, motivated by the teaching of WO '472 that the fruit extracts manage dermatological conditions related to aging, with reasonable expectation of having a topical composition that provides the cultured plant seed cells to the skin, nails or hair at the desired amount to a particular location with disorder and in need for the such a treatment with success.

Response to Arguments

9. Applicant's arguments filed 02/15/2006 have been fully considered but they are not persuasive.

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Applicants traverse the rejection of the pending claims over US '878 in view of WO '472 by arguing that:

- Applicants argue that US '878 discloses single functional class of plant cell constituent, namely dormans, while the present invention produce plant cell having a broad range of plant cell constituents.

In response to this argument, applicants' attention is drawn to the expression "comprising" of the claim language that permits the presence of dorman cells, even in major amounts. The reference clearly teaches cultured seeds, and once the seed get cultured, undifferentiating of the cell start and it is expected that the culture will have broad range of cell constituents.

- Applicants argue that US '878 does not disclose embodiment or working examples for undifferentiated homogenizing plant seed cells.

In response to this argument, the examiner position is that the disclosed examples and preferred embodiment do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). The reference disclosed the culture of different parts of the plant including seeds, and also disclosed homogenization of the culture that includes any cultured part including the cells.

- Applicants argue that US '878 teaches cultures derived from any plant part: bulb, comb, root and seed, thus, the seed must be selected from a list of at least four plant parts.

In response to this argument, the examiner position is that the art recognized topical composition comprising cultured seeds, and a conclusion of obviousness under 35 U.S.C. 103 (a) does not require absolute predictability, only a reasonable expectation of success; and references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. *In re Bozek*, 163 USPQ 545 (CCPA 1969). In the light of the foregoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the claims would have been obvious within the meaning of 35 U.S.C. 103 (a).

- Applicants argue that US '878 does not teach differentiated/substantially differentiated cells.

In response to this argument, the examiner position is that it is expected to have undifferentiated cells once the seeds are cultured in any culture media, thus, the cultured seeds disclosed by US '878 are undifferentiated. Note that the "expression "comprising" of the claims' language permits the presence of "differentiated cells".

- Applicants argue that US 878 teaches homogenization and non-homogenized plant cells.

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In response to this argument, it is noted that the expression “comprising” of the claims’ language permits the presence of “non-homogenized plant cells”.

- Applicants argue that WO 472 discloses a skin composition containing fruit extract and not plant seed cells.

In response to this argument, the examiner position is that WO ‘472 is relied upon for the sole teaching of the suitability of different seed extracts in cosmetics, therefore, since the art recognized using the cultured cells, then these seeds useful as an extract would be used also as cultured. The rationale to modify the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art and the reason to modify the reference may often suggest what the applicant has done. The invention as a whole is disclosed by the references in combination.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isis Ghali whose telephone number is (571) 272-0595. The examiner can normally be reached on Monday-Thursday, 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Thurman Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isis Ghali
Examiner
Art Unit 1615
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**ISIS GHALI
PATENT EXAMINER**